

Response of Goyang City, to the COVID-19 Crisis



‘ Launched the nation’s first drive-through COVID-19 screening center, and videotelephony-based examination between the COVID-19 screening centers and community health centers ’

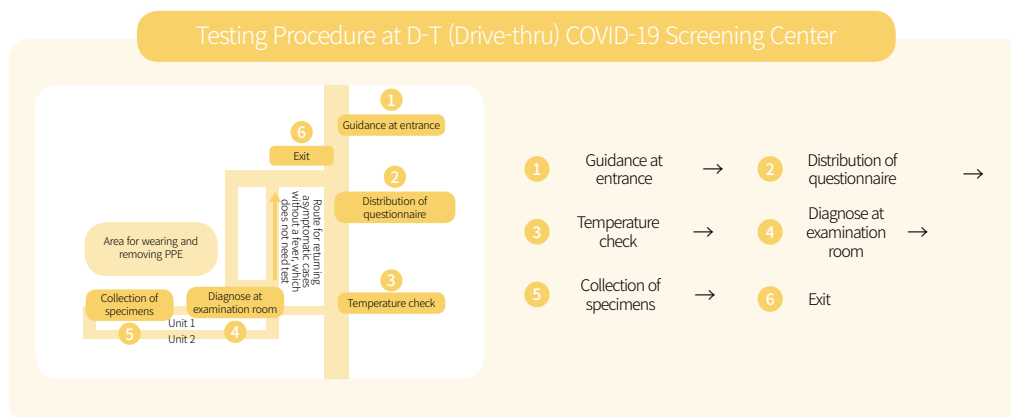
The COVID-19 is sweeping the world. It is transmitted between persons through droplets, and thus in a closed place packed with people, it can spread easily and rapidly. There has emerged a need to prevent infections between visitors who are queuing for testing, to protect medical professionals, and to minimize the number of people waiting in line. Goyang City, Gyeonggi-do has responded to the pandemic crisis by introducing a drive-through COVID-19 screening center for the first time in the world, and treatment using videotelephony.

01 Goyang City introduces the first drive-through COVID-19 screening center in the world

The existing coronavirus testing method used at community health centers and hospitals required 30 minutes to one hour for testing and the subsequent disinfection of the examination room. With the spread of coronavirus, the number of suspected cases rose, saturating the screening centers, making wait times longer, thereby limiting the number of tests possible in a day. Hence, Goyang City of Gyeonggi-do introduced a drive-through screening center where people inside cars could be examined.

The drive-through screening center is an adaptation of the drive-through systems used at fast-food restaurants. Drivers who want to be tested for COVID-19 while sitting in a vehicle were visited by medical staff wearing personal protective equipment standing outside.

The whole process from reception, interview, temperature taking, and specimen collection from the nose and mouth takes only ten minutes. This new testing format can save time taken in sterilizing examination rooms, enabling the testing of six to seven persons in an hour. The curtailed testing time allowed more people to get screened, and mitigated the risk of cross-infection among people queuing in line for a test. As the efficiency of the drive-through screening center is proved, the system has been applied by local governments nationwide.



Drivers entering the COVID-19 drive-through screening center are instructed to refrain from talking and to fill out health questionnaires. Drivers open car windows only 5 cm, to receive and fill out questionnaires, take temperatures and then proceed on to the examination room.

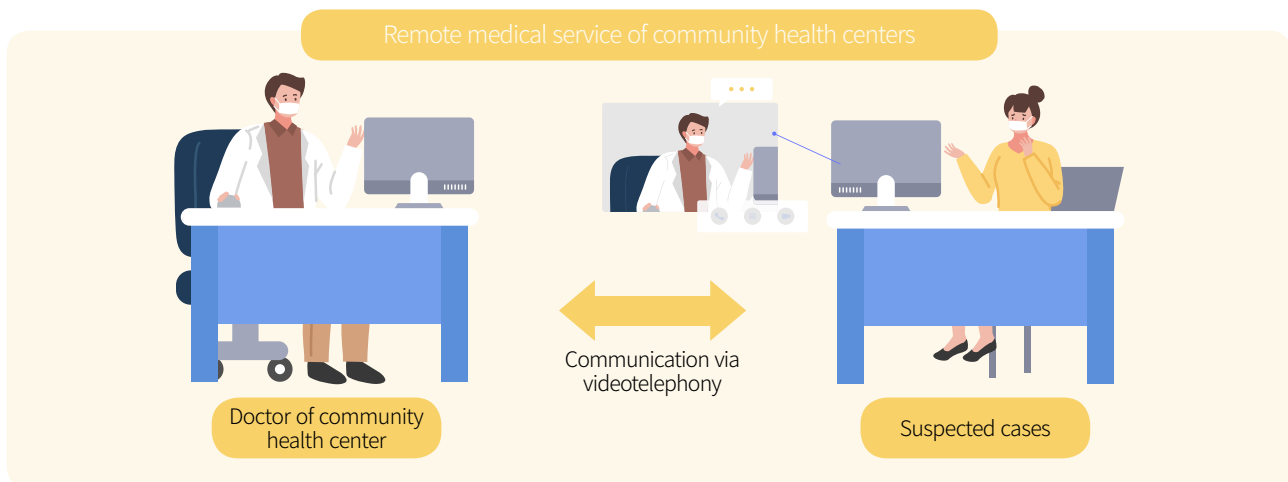
Based on the questionnaire, doctors examine the patients inside cars and nurses wearing personal protective equipment collect specimens. Upon the completion of testing, drivers receive guideline on self-quarantine and go home. If a fever and serious symptoms are detected, patients exit their cars and are taken to hospitals.

02 Examination of Suspected Cases Through Videotelephony Using Tablet PCs

The most creative method among those being implemented by Goyang City is examination via videotelephony. Doctors had to wear personal protective equipment (PPE) to examine suspected cases and change the PPE before examining other patients. However, as the suspected cases of COVID-19 spiked, such a long process caused a lot of hassles and inconveniences. Furthermore, as suspected cases visited hospitals and contacted others, there was a growing concern that they would spread the coronavirus.

To address this problem, Goyang City introduced examination via videotelephony. Through videotelephony, people at home could talk with doctors, take their temperature on their own, and answer questionnaires. If an infection is expected after the examination, they will be carried via ambulances to community health centers.

If suspected patients visit three community health centers, they are guided to COVID-19 screening centers which are separated from the community health centers and are examined by doctors through videotelephony. This minimizes the movement of suspected patients and enables a prompt examination and treatment. Moreover, by shielding ordinary hospital visitors from being those possibly infected, it made a significant contribution to improving the overall process of the on-site response to infections including COVID-19.



If a suspected case applies for a mobile remote examination, they need to fill out health questionnaires regarding their symptoms of COVID-19 such as a fever, cough, and respiratory status. When applications are received and hospitals are designated, suspected patients receive a notification via KaKaoTalk (mobile messenger). Then they go through an identity confirmation, select a pharmacy where they pick up medicine and talk with doctors through videotelephony.

They are asked about their symptoms and side effects of the medicine, answer more questions and are examined. When the videotelephony is completed, suspected cases receive a message about the cost of medical examination and payment details, transfer their payment and visit the designated pharmacy to purchase the prescription. On the following day, they receive medical services from doctors again via videotelephony.